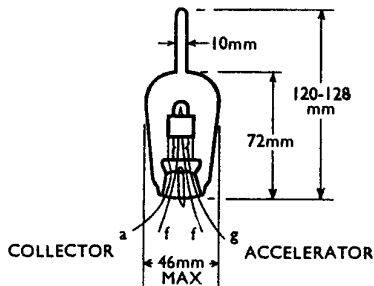


IONISATION GAUGE.

GENERAL.

The gauge is in the form of a bright tungsten filament triode with a lead glass (L1) stem tube and is designed to measure pressures below one micron of mercury.

CONNECTIONS AND VALVE DIMENSIONS



FILAMENT

V_f	5 nominal	V
I_f	0.66 approx	A

RATINGS

V_a	250 max	V
P_a	22 max	W
P_g	6 max	W
I_{a+g}	100 max	mA
μ	9 approx	

TYPICAL OPERATING DATA

The gauge must be thoroughly outgassed each time the electrodes have been exposed to the atmosphere.

- Bake at 350°-380°C for 5 mins.
- Connect anode and grid strapped, to +H.T. supply (200-240V).
- Adjust current by varying filament voltage (7-8V) until combined anode+grid dissipation is 20W approx. Maintain for 10 mins.

Grid (accelerator) potential	+100V
Anode (collector)	-10V
Space Current	2 mA
Sensitivity (for air)	14 μ A per micron

Obtain correct space current by adjusting filament voltage (5V approx.).

The collector current varies linearly with pressure up to about one micron (0.001 mm. Hg).

Notes. The calibration is for dry air only.

To obtain maximum life, the pressure should be kept below one micron while the gauge filament is hot.